

MEMORANDUM

DATE: July 19, 2010

TO: Division File

FROM: Lance Range, Illinois EPA *LJR*

SUBJECT: Sediment Sample X213

SITE NUMBER: 1210500002 – Marion County
Sandoval/Sandoval Zinc Company

Sandoval Zinc Co. is located just east of the city limits of Sandoval in Marion County, Illinois. The Sandoval Zinc Co. smelter facility began operating as a primary zinc smelter sometime between 1885 and 1890. In 1914, a fire destroyed the smelter, and in 1915 the company began operating as a secondary zinc smelter. Compounds fed into the kilns were pure zinc, zinc oxide, zinc chloride, possibly aluminum chloride, and other trace metals. The facility remained a secondary smelter until it was closed in 1985. In December 1986, the Sandoval Zinc Co. was officially dissolved and the owners declared bankruptcy.

During the first 85 years of operation, the principal waste emissions from the plant were metal-laden cinders and windblown ash. Large quantities of cinders from the smelting process were used in constructing and surfacing secondary roads in the plant area and as fill material on the property. Cinders that could not be utilized by the plant were placed in large piles on the property and offered to the public and the city of Sandoval for use in constructing and surfacing roadways, driveways, sidewalks, and parking lots. Many areas throughout Sandoval exhibit evidence of the use of cinders.

During the Public Availability Session conducted on July 14, 2010, Lance Range (Illinois EPA) spoke with Mr. Joe Splain. Mr. Splain lives to the north of the site on U.S. Hwy 50. As I spoke with Mr. Splain, he informed me that he has seen individuals on the Sandoval Zinc Company property, specifically on the old furnace located in the northeast portion of the site. I asked Mr. Splain if he had any information pertaining to the location or storage of cinders at or near the site. Mr. Splain spoke of piles of cinders which used to be located on the north side of the railroad tracks, directly north of the Sandoval Zinc Company property during the 1980s. These piles were subsequently worked into the surrounding area when the area was attempted to be farmed.

During the 2009 Expanded Site Inspection, X213 was collected from the area north of the railroad tracks. This sample was collected upstream of the surface runoff. The results from this sediment sample revealed elevated contaminants attributable to the processes which occurred at the Sandoval Zinc Company. These elevated levels of inorganics can be explained from the storage and subsequent spreading of the cinders from Mr. Splain's observations.